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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PARK, JEONG S	

ART UNIT	PAPER NUMBER
2454	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/763,135	DAN ET AL.	
	Examiner	Art Unit	
	JEONG S. PARK	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *35,36,38-55 and 58-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *35,36,38-55 and 58-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/1/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Application No. 10/763,135 filed on 22 January 2004. The amendment presented on 22 May 2009, which cancels claims 37, 56 and 57, and adds new claims 58-62, is hereby acknowledged. Claims 35, 36, 38-55 and 58-62 have been examined.

Response to Arguments

2. Applicant's arguments with respect to claims 35, 36, 38-55 and 58-62 have been considered but are moot in view of the new ground(s) of rejection.

A. Summary of Applicant's Arguments

In the remarks, the applicant argues as followings:

Regarding amended claim 55, the Applicants submit that the determinations made by the resource manager taught by Sankaranarayan are based on the amount of resources available and the priorities of the various activities. The determinations taught by Sankaranarayan are not based on a dollar value sent by the server nodes to the remote location.

B. Response to Arguments:

In response to argument, the deficiency of Fellenstein is taught by Barsness not by Sankaranarayan. Barsness teaches as follows:

A number of nodes requested (estimates the resources that are needed to complete the request within the required completion time, see, e.g., col. 9, lines 1-5);

a time duration requested (required completion time for the request in the customer's service contract, see, e.g., col. 7, lines 9-13); and

a dollar value associated with the request (determining a price to be charged for performing the request based on the amount of time, see, e.g., col. 2, lines 36-39).

Therefore, Barsness teaches a method or a system for determining a number of nodes, a time duration and a dollar value associated with the request.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 35, 39, 44-48, 54, 55, and 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellenstein et al. (hereinafter Fellenstein)(U.S. Patent No. 7,406,691 B2) in view of Barsness et al. (hereinafter Barsness)(U.S. Patent No. 7,379,884 B2), and further in view of Patel et al. (hereinafter Patel)(U.S. Patent No. 7,043,225 B1).

Regarding claim 55, Fellenstein teaches as follows:

A method for supporting an application workload (job request from client system 200 in figure 2) using a resource at a remote location (virtual resource 160 in figure 2)(allocating additional resources to a job submitted to a first selection of resources in a grid environment, see, e.g., col. 3, lines 25-36), the method comprising:

assigning a subset of a plurality of server nodes to execute the application

workload (grid management system controls distribution of each job to a selection computing systems of virtual resource, see, e.g., col. 7, lines 23-27);

executing the application workload on the assigned server nodes (virtual resource handles the request and returns the result, see, e.g., col. 7, lines 28-31);

monitoring execution of the application workload to determine whether a threshold of a performance requirement of a service level agreement specifying performance requirements for execution of the application workload is met (not meeting performance requirements for a job from client system, then additional resources may be allocated including other resources from external grids, see, e.g., col. 10, lines 1-9); and

responsive to a determination that the threshold of the performance requirement is not being met sending a request for at least one server node at the remote location (if not meeting the performance requirement, then additional resources may be allocated including other resources from external grids, see, e.g., col. 10, lines 1-9).

Fellenstein does not teach of specifying a number of nodes requested, a time duration for which the requested nodes are needed, and a dollar value associated with the request.

Barsness teaches as follows;

A number of nodes requested (estimates the resources that are needed to complete the request within the required completion time, see, e.g., col. 9, lines 1-5);

a time duration requested (required completion time for the request in the customer's service contract, see, e.g., col. 7, lines 9-13); and

a dollar value associated with the request (determining a price to be charged for performing the request based on the amount of time, see, e.g., col. 2, lines 36-39).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein with Barsness in order to efficiently assign available resources in the grid environment based on the requested job characteristics.

Fellenstein in view of Barsness do not teach of receiving from the remote location an acceptance of the request in accordance with the dollar value.

Patel teaches as follows:

Receiving from the remote location an acceptance of the request in accordance with the dollar value (the resource manager receives requests for wireless services from a consumer, service provider determines resource availability based on the request, generates a response based on resource availability, and sends the response to the requestor. The agreed upon terms define a SLA and may specify a wireless region, price, time, type of service, bandwidth and other suitable conditions of service, see, e.g., col. 5, lines 31-51).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein in view of Barsness with Patel in order to efficiently negotiate a SLA between a service requester and a resource manager.

Regarding claim 35, Fellenstein teaches as follows:

A first application workload executes on a first server cluster (GM 504 in figure 5) having a first domain (local grid) and the remote location (GM510 or GM 520 in figure 5) includes a second domain (grid A or grid B in figure 5) having a second server cluster

running a second application workload further comprising:

monitoring execution of the first application workload to determine whether the performance requirements for execution of the first application workload specified in the service level agreement will continue to be met (not meeting performance requirements for a job from client system, then additional resources may be allocated including other resources from external grids, see, e.g., col. 10, lines 1-9); and

responsive to a determination that the performance requirements for execution of the first application workload will not continue to be met, sending a request to the second domain to assign one or more of the plurality of server nodes in the second server cluster at the second domain to the execution of the first application workload (if not meeting the performance requirement, then additional resources may be allocated including other resources from external grids, see, e.g., col. 10, lines 1-9).

Regarding claim 39, it is rejected for same reason as presented above per claim 55.

Regarding claim 44, Barsness teaches as follows:

The dollar value associated with the request is a payment amount for the number of server nodes requested (determining a price to be charged for performing the request based on the amount of time, see, e.g., col. 2, lines 36-39).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein in view of Patel with Barsness in order to efficiently assign available resources in the grid environment based on the requested job characteristics.

Regarding claims 45-48, Fellenstein teaches multiple computer systems managed to provide resources (see, e.g., col. 4, line 65 to col. 5, line 51 and 100 in figure 1), which are capable of running any applications including stock trades as a transaction application and optimization of a stock portfolio as a parallel application.

Regarding claim 54, Fellenstein teaches as follows:

Monitoring one or more of a transaction rate, a transaction response time, availability of a server node, and utilization of a server node (the resource monitor execute performance check that surveys the performance of available resources, see, e.g., col. 11, lines 58-67).

Regarding claim 58-60, Patel teaches as follows:

Receiving the acceptance in accordance with a comparison of the dollar value and a minimum acceptable payment amount (the resource manager determines pricing from the pricing manager and the resource manager generates response based on the pricing information, see, e.g., col. 11, lines 33-48);

wherein the minimum acceptable payment amount (interpreted as the price offered from the resource manager) is determined in accordance with a determination of the value of processing operations performed at the remote location (the offered price from the resource manager is for the specified level of wireless resources, see, e.g., col. 8, lines 48-56); and

the value of processing operations performed at the remote location is determined in accordance with a service level agreement of the remote location (the SLA includes price parameters and service type parameters. The service type

parameters include different class or quality of service (QoS) types such as gold, silver, bronze, premium, assured, and best efforts, see, e.g., col. 6, lines 22-42).

Therefore, they are rejected for similar reason as presented above in claim 55.

Regarding claims 61 and 62, they are rejected for similar reason as presented above in claim 55.

5. Claims 43 and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellenstein et al. (hereinafter Fellenstein)(U.S. Patent No. 7,406,691 B2) in view of Barsness et al. (hereinafter Barsness)(U.S. Patent No. 7,379,884 B2) and Patel et al. (hereinafter Patel)(U.S. Patent No. 7,043,225 B1), and further in view of Ellesson et al. (hereinafter Ellesson)(U.S. Patent No. 6,459,682 B1).

Regarding claim 43, Fellenstein does not explicitly teach of the dollar value associated with the request is a penalty specified in the SLA.

Barsness teaches of determining a price to be charged for performing the request based on the amount of time (see, e.g., col. 2, lines 36-39).

Fellenstein in view of Barsness and Patel do not teach the penalty parameter on SLA.

Ellesson teaches that specifying the action to be taken when traffic belonging to this service level is found to be in violation of an assigned traffic rate and the action could take the form of dropping packets, downgrading packets to a different server level and so on (see, e.g., col. 8, lines 52-58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein in view of Barsness and Patel with Ellesson in order to charge differently when the traffic violates the current SLA.

Regarding claims 49-53, Fellenstein teaches of performance specification including quality of service specifications compiled from service level objects and agreements (see, e.g., col. 10, lines 38-43).

Fellenstein in view of Barsness and Gray do not teach of specifying SLA including throughput, response time, availability, downtime and penalty function.

Ellesson teaches the well know SLA includes the claimed limitations (see, e.g., col. 1, lines 37-55).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein in view of Barsness and Patel with Ellesson in order to efficiently monitor the performance of a network as measured against multiple SLA agreements.

6. Claims 36, 38 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fellenstein et al. (hereinafter Fellenstein)(U.S. Patent No. 7,406,691 B2) in view of Barsness et al. (hereinafter Barsness)(U.S. Patent No. 7,379,884 B2) and Patel et al. (hereinafter Patel)(U.S. Patent No. 7,043,225 B1), and further in view of Sankaranarayan et al. (hereinafter Sankaranarayan)(U.S. Patent No. 6,799,208 B1).

Regarding claims 36, 38 and 40-42, Fellenstein in view of Barsness and Patel teach all the limitations of claims except for receiving a counter offer, sending a

response indicating acceptance or rejection of the counter offer, and receiving refusal by denying the request (the examiner interpreted as communications between the resource requestor and the resource providers regarding allocating available resources based on performance requirements and available resources).

Sankaranarayan teaches as follows:

The resource allocation process based on the received request from the application and available resources from the provider (see, e.g., col. 14, line 55 to col. 15, line 54 and figure 6);

the resource manager asks each resource provider identified in the configuration to determine whether it can allocate its resource to the activity (see, e.g., col. 14, lines 60-67 and step 602 in figure 6); and

the resource manager continues successively through each fallback configuration (see, e.g., col. 17, lines 51-64) until finding a configuration that can be satisfied with the currently available resources or discovering that no fallback configuration can be satisfied (see, e.g., col. 17, line 65 to col. 18, line 17).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Fellenstein in view Barsness and Patel with Sankaranarayan to include negotiating method between the resource requester and the resource providers as taught by Sankaranarayan in order to efficiently allocate the available resources to the resource requester based on the availability of resources at the time of requests.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./
Examiner, Art Unit 2454

September 23, 2009

/NATHAN FLYNN/
Supervisory Patent Examiner, Art Unit 2454